HEWLETT-PACKARD COMPANY Intellectual Property Administration P. O. Box 272400 Fort Collins, Colorado 80527-2400





IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Sing Bing Kang et al.

Confirmation No.: 1976

Application No.: 09/298,372

Examiner: B. Yenke

Filing Date:

04/23/99

Group Art Unit: 2614

Title:

CAMERA CALIBRATION USING OFF-AXIS ILLUMINATION AND VIGNETTING EFFECTS

Mail Stop PGPUB Drawings **Commissioner for Patents** PO Box 1450 Alexandria, VA 22313-1450

DRAWING TRANSMITTAL LETTER	
Sir:	
Enclosed herewit	h please find:
() sh ap	neets of redlined drawing(s) which indicate proposed changes to the drawing(s). Upon oproval of these proposed changes, formal drawing(s) will be submitted.
() sh	neets of corrected formal drawing(s), as required by the Notice of Patent Drawings bjection (PTO-948) which accompanied the Office Action dated
() sh	neets of corrected formal drawing(s), as required by the Notice of Patent Drawings bjection (PTO-948) and approved in the Notice of Allowability dated
(x) <u>7</u> sh	neets of formal drawing(s). Please substitute these formal drawing(s) for the informal rawing(s) originally filed.
()	
Examiner's approadded.	oval of the entry of these drawings is respectfully requested. No new matter has been
	Respectfully submitted,
	Hamilton Brook Crith & Daynalda D

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Reg. No.

45,566

Date: 8/21/03

Telephone No.: (978) 341-0036

Appl'n No.: 09/298,372
.Tit Camera Calibration Using Off-Axis (Inventors: Sing Bing Kang et al. Replacement Sheet 1/7 STORAGE Model **SYSTEM BUS** I/O SYSTEM 104 SYSTEM BUS CHIP SET CPU MODULE PROCESSOR BUS SYSTEM MEMORY Model

AUG 2 5 2003

Appl'n No.: 09/298,372

Time Camera Calibration Using Off-Axis
Inventors: Sing Bing Kang et al.

Replacement Sheet



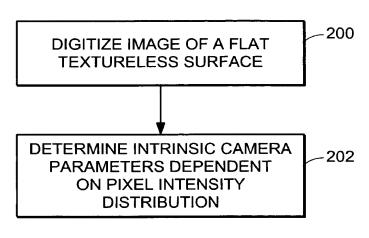
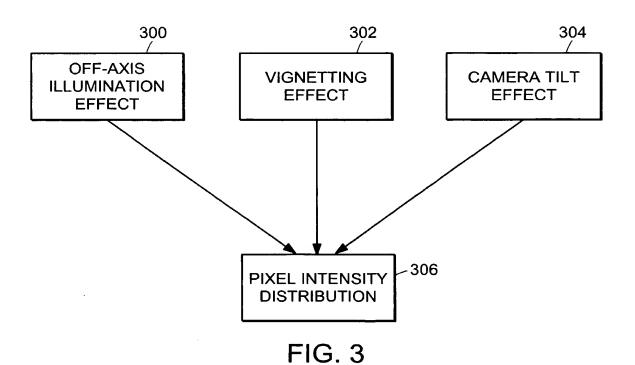


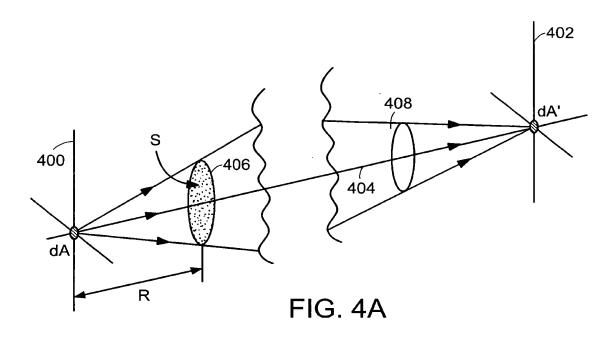
FIG. 2

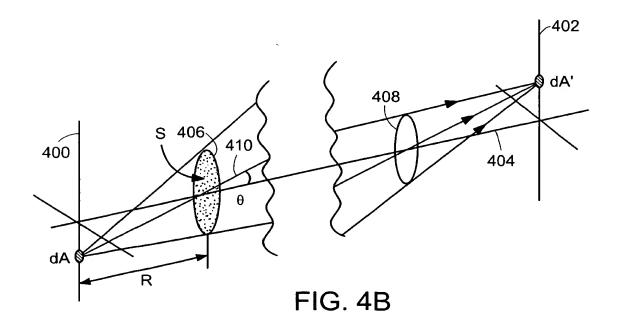


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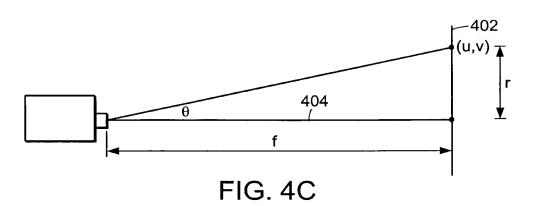


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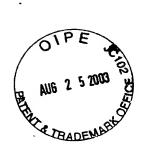
402 (u,v)

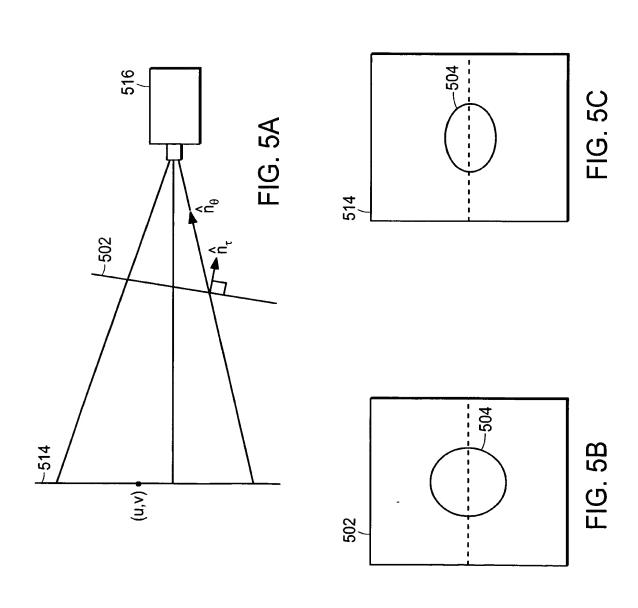
FIG. 4D

Appl'n No.: 09/298,372
Title Camera Calibration Using Off-Axis . .

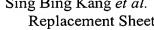
Inventors: Sing Bing Kang et al.

Replacement Sheet





Appl'n No.: 09/298,372
Title Camera Calibration Using Off-Axis.
Inventors: Sing Bing Kang et al.
Replacement Sheet





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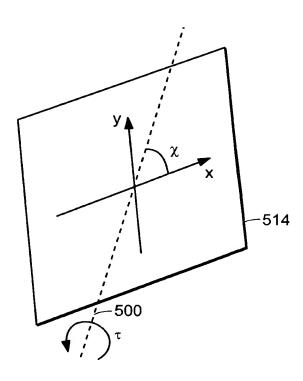
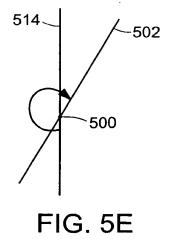
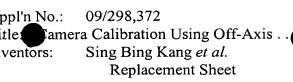


FIG. 5D



Appl'n No.: Title am

Inventors:





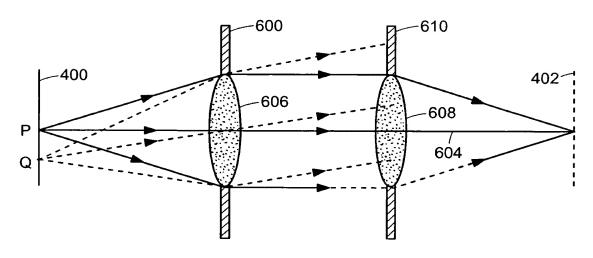


FIG. 6A

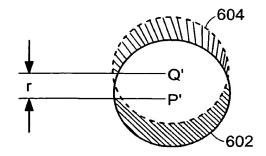


FIG. 6B